

is read from the relevant list L1, L2 and a connection initiation is started. If no further data record exists within the list L1, L2, the procedure restarts with the first data record of the list L1, L2.

Alternatively, if no further data record exists, following a predefined pause
5 time, during which the telecommunications connection set-up is temporarily impossible (e.g., interruption of the telecommunications connection set-up), the procedure can restart with the first data record.

ABSTRACT OF THE DISCLOSURE

In order to support the effective use of services in wireless telecommunications
10 systems, radio devices are designed in such a way that they maintain at least two lists in which connection-relevant data of base stations are stored, separated according to the service which they support. In order to set up a connection, a base station is determined from the list according to the required service.

IN THE CLAIMS

15 On page 9, cancel line 1, and substitute the following left-hand justified heading therefor:
CLAIMS

Please cancel claims 1-15, without prejudice, and substitute the following claims therefor:

20 16. A method for controlling the selection of base stations in a cellular radio telecommunications system, the method comprising the steps of:

operating, in at least one radio cell of the radio telecommunications
system, at least one base station and at least one radio device for the purposes of
wireless telecommunication;

25 supporting at least one first service and one second service by the radio device;

storing connection-relevant data in at least one memory via the radio
device;

30 signaling to the radio device, via the at least one base station, in system information, which service the at least one base station supports;

storing primary data records of the at least one base station, via the radio device, in the form of a first list in the memory, if the at least one base station signals to the radio device in the system information that the at least one base station supports the first service;

5 storing secondary data records of the at least one base station, via the radio device, in the form of a second list, if the at least one base station signals to the radio device in the system information that the at least one base station supports the second service; and

10 updating at least one of the first list and the second list, via the radio device, if the data of the at least one base station is modified.

al 15 17. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, wherein the primary and secondary data records of the at least one base station stored in the first and second lists are arranged according to transmission characteristics of the at least one base station.

20 18. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, wherein the primary and secondary data records of the at least one base station stored in the first and second lists are arranged at least according to an ordering criterion based on a type of data store.

25 19. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, wherein the primary and secondary data records of the at least one base station stored in the first and second lists are arranged in a sequence of their respective occurrence.

30 20. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, the method further comprising the steps of:

reading out a first data record, via the radio device, of the primary data records when the radio device sets up a telecommunications connection to the at least one base station which supports the first service;

5 reading out a first data record, via the radio device, of the secondary data records when the radio device sets up a telecommunications connection to the at least one base station which supports the second service;

10 reading out a second data record, via the radio device and if the connection set up fails, from one of the primary and the secondary data records in the respective lists and setting up a connection to the corresponding at least one base station via the radio device; and

restarting the read out of the first data record of the respective list, via the radio device, if no connection has yet been set up and the second data record was the last data record in the respective list.

15 21. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, the method further comprising the steps of:

20 reading out a first data record of the primary data records, via the radio device, when the radio device sets up a telecommunications connection to the at least one base station which supports the first service;

reading out a first data record of the secondary data records, via the radio device, when the radio device sets up a telecommunications connection to the at least one base station which supports the second service;

25 reading out a second data record from one of the primary and the secondary data records in the respective list, via the radio device and if the connection set up fails, and setting up a connection to the corresponding at least one base station via the radio device; and

30 restarting the read out of the first data record of the respective list at an end of a predefined pause time, via the radio device, if no connection has yet been set up and the second data record was the last data record in the respective list.

22. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, wherein the radio device is a radio network termination.

5 23. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, the method further comprising the step of:

allocating, given a plurality of radio cells in the radio telecommunications system, the same radio ranges to the radio cells.

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24. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 23, wherein the radio telecommunications system operates according to the DECT standard.

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25. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, the method further comprising the step of:

allocating, given a plurality of radio cells in the radio telecommunications system, different radio ranges to the radio cells.

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26. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 25, wherein the radio telecommunications system operates according to the UMTS standard.

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27. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 25, wherein the same type of data is transmitted in the first service and in the second service, and the first service and the second service are made available in different radio cells.

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28. A method for controlling the selection of base stations in a cellular radio telecommunications system as claimed in claim 16, wherein different types of data are transmitted in the first service and in the second service.